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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141.

16

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/650,729

Applicant(s)

CHURCHYARD ET AL.

Examiner

Quang N. Nguyen

Art Unit

2141

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 April 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see the attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: None.

Claim(s) objected to: None.

Claim(s) rejected: 1-16.

Claim(s) withdrawn from consideration: None.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

***Detail Action***

1. This Office Action is in response to the Amendment B filed on 04/22/2004. Claim 14 has been amended. Claims 1-16 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-2 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art, herein after referred as AAPA, in view of Feldman et al. (6,130,889), herein after referred as Feldman.**

4. As per Claim 1, AAPA discloses a method of maintaining a data communications protocol session, the method comprising the steps of:

    sending a request from a client 130 to a server 140 over a data communications network (AAPA, Fig. 1, pg. 1, lines 13-24);

    receiving said request in said server 140 (AAPA, Fig. 1, pg. 1, lines 13-24);

Art Unit: 2141

sending a response to said request from said server 140 to said client 130 over said data communications network 190 (AAPA, Fig. 1, pg. 2, lines 1-2);

receiving said response in an agent (*proxies 110 and 160; and firewalls 120 and 150*) (AAPA, Fig. 1, pg. 1, lines 13-24);

sending said response from said agent 110 to said client 130;

receiving said response in said client 130 (AAPA, Fig. 1, pg. 1, lines 13-24);

However, the AAPA does not explicitly teach the steps of determining if illusory content needs to be sent prior to sending said response; performing processing in said agent as a result of said response; and if illusory content needs to be sent during said processing, sending one or more messages containing illusory content from said agent to said client, wherein said one or more messages containing said illusory content is sent for preventing a time out operation as a result of security processing.

In the related art, Feldman teaches Integrated Switch Router "ISR" (*agent*) sends one or more VC KeepAlive messages (*i.e., sending one or more messages containing illusory content*) to inform its neighbor (*client*) of its continued existence. In order to prevent a neighbor timeout period from expiring (*i.e., determining if illusory content messages need to be sent*), ISR periodically sends or forwards the VC Keep Alive messages to neighbors for preventing the neighbor timeout period from expiring in the event when no other protocol messages have been transmitted (*i.e., no response protocol messages have been sent to the client*) within the periodic interval time (Feldman, col. 7, lines 25-31).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the AAPA method of maintaining data communications to include determining if illusory content needs to be sent during said processing, sending one or more messages containing illusory content from said agent to said client, as taught by Feldman, for the purpose of preventing a neighbor timeout period from expiring in the event when no other protocol messages have been transmitted within the periodic interval time (Feldman, col. 7, lines 25-31).

5. Claims 2 and 15-16 are corresponding method, computer readable medium and system claims of claim 1; therefore, they are rejected under the same rationale.

6. As per Claim 13, AAPA in view of Feldman discloses the method of claim 2, and AAPA further discloses wherein said data communications protocol session further comprises an HTTP session (AAPA, pg. 2, lines 1-12). Note: Examiner assumes applicant intended HTTP, not HTML, as the context of the claim is in regard to a protocol, not a language.

7. As per Claim 14, AAPA in view of Feldman discloses the method of claim 13, and AAPA further discloses wherein said step of sending one or more messages containing illusory content further comprises the steps of: creating a copy of said response; modifying said copy of said response by inserting an entity-header (*according to RFC 2616, "http://www.faqs.org/rfcs/rfc2616.html" header fields may also be modified,*

Art Unit: 2141

*extended to allow for additional entity-header field*); and transmitting said modified response said client.

**8. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Feldman et al (6,130,889), as applied to claim 2 above, and further in view of Kloth (6,598,034).**

9. As per Claim 3, AAPA in view of Feldman discloses the method of claim 2, but lacks wherein said step of receiving a response further comprises receiving a file.

In the related art, Kloth discloses receiving a response further comprises receiving a file for the purpose of exchanging files on the Internet (Kloth, col. 11, lines 1-3).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the AAPA in view of Feldman method of maintaining communications to include wherein said step of receiving a response further comprises receiving a file, as taught by Kloth, for the purpose of exchanging files on the Internet (Kloth, col. 11, lines 1-3).

10. As per Claims 4-5, AAPA in view of Feldman, and further in view of Kloth discloses the method of claim 3, and Kloth further discloses wherein said file further comprises a computer program (Kloth, col. 11, lines 9-11) and wherein said file further comprises a document (Kloth, web page - col. 11, line 7).

**11. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Feldman et al (6,130,889), as applied to claim 2 above, and further in view of Ji et al. (5,623,600).**

12. As per Claim 6, AAPA in view of Feldman discloses the method of claim 2, but lacks wherein said step of performing processing further comprises searching a file.

In the related art, Ji teaches wherein said step of performing processing further comprises searching a file (Ji, col. 5, lines 30-38) for the purpose of detecting viruses in file transfers (Ji, col. 4, lines 63-67).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the AAPA in view of Feldman method of maintaining communications to include wherein said step of performing processing further comprises searching a file, as taught by Ji, for the purpose of detecting viruses in file transfers (Ji, col. 4, lines 63-67).

13. As per Claim 7, AAPA in view of Feldman, and further in view of Ji discloses the method of claim 6, and Ji further discloses wherein said step of searching a file further comprises scanning said file for one or more computer viruses (Ji, col. 4, lines 63-67).

14. As per Claim 8, AAPA in view of Feldman, and further in view of Ji discloses the method of claim 6, and Ji further discloses wherein said step of searching a file further comprises scanning for one or more text phrases (Ji, col. 2, lines 1-5).

**15. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Feldman et al (6,130,889), as applied to claim 2 above, and further in view of Hair (6,615,349).**

16. As per Claims 9-10, AAPA in view of Feldman discloses the method of claim 2, but lacks wherein said step of performing processing further comprises encrypting a file and decrypting a file.

In the related art, Hair teaches encrypting a file or decrypting a file (Hair, col. 4, lines 63-67; col. 5, line 18) for the purpose of improved secure transmission of files over the Internet (Hair, col. 1, lines 15-17).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the AAPA in view of Feldman method of maintaining communications to include further comprising encrypting a file or decrypting a file, as taught by Hair, for the purpose of improved secure transmission of files over the Internet (Hair, col. 1, lines 15-17).



**17. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Feldman et al (6,130,889), as applied to claim 2 above, and further in view of Takaragi et al (6,615,349).**

18. As per Claims 11-12, AAPA in view of Feldman discloses the method of claim 2, but lacks wherein said step of performing processing further comprises creating a public key digital signature and verifying a public key digital signature.

In the related art, Takaragi teaches creating a public key digital signature or verifying a public key digital signature (Takaragi, col. 4, lines 19-24) for the purpose of securing the security of a computer network (Takaragi, col. 1, lines 5-8).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the AAPA in view of Feldman method of maintaining communications to include further comprising creating a public key digital signature and verifying a public key digital signature, as taught by Takaragi et al, for the purpose of securing the security of a computer network (Takaragi, col. 1, lines 5-8).

***Response to Arguments***

19. In the remarks, applicant argued in substance that

(A) Prior Art does not teach or suggest “one ore more messages containing said illusory content is sent for preventing a time out operation as a result of security processing”.

As to point (A), **AAPA** teaches certain processes (*such as scanning a file requested by a client, encrypting/decrypting processes, or inserting advertising, etc.*) that may occur at an agent of an entity (*proxies 110 and 160 and/or firewalls 120 and 150*) communicating over a communication network can take a significant amount of time to complete while executing at a firewall (*encrypting/decrypting or scanning for virus as a result of security processing*) (**AAPA**, page 2, lines 13-19). Examiner also submits that these above processes, which are also well known and conventionally processed in the art at an intermediate node such as an ISP, proxy, gateway, or firewall.

In the related art, **Feldman** teaches an Integrated Switch Router “ISR” (*here could be given a broad and reasonable interpretation as an agent*) sends one or more VC KeepAlive messages (*i.e., sending one or more messages containing illusory content*) to inform its neighbor (*read as a client*) of its continued existence. In order to prevent a neighbor timeout period from expiring (*i.e., determining if illusory content messages need to be sent*), ISR periodically sends or forwards the VC Keep Alive

Art Unit: 2141

messages to neighbors for preventing the neighbor timeout period from expiring in the event when no other protocol messages have been transmitted (*i.e., no response protocol messages have been sent to the client*) within the periodic interval time (**Feldman**, col. 7, lines 25-31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of **AAPA** and **Feldman** to send one or more messages containing said illusory content (*i.e., VC KeepAlive messages*) from an agent to a client for preventing a time out operation as a result of security processing.

(**B**) Prior Art does not teach or suggest "creating a copy of said response; modifying said copy of said response by inserting an entity-header and transmitting said modified response said client".

As to point (**B**), see the rejection of claim 14 in paragraph 7 above and Examiner also submits that the RFC 2616 is considered as a prior art.

20. Applicant's arguments as well as request for reconsideration filed on 04/22/2004 have been fully considered but they are not deemed to be persuasive.

Art Unit: 2141

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (703) 305-8190.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (703) 305-4003. The fax phone number for the organization is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Quang N. Nguyen

  
**RUPAL DHARIA**  
**SUPERVISORY PATENT EXAMINER**